DOCUMENT RESUME

ED 098 314 CE 002 378

TITLE	Guidelines for Assessment of Sex Bias and Sex Fairness in Career Interest Inventories.
INSTITUTION	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	Jul 74
NOTE	13p.
EDRS PRICE	MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS	Bias; Females; *Guidelines; *Interest Scales; *Interest Tests; Males; *Sex Discrimination

ABSTRACT

The draft guidelines are the outcome of a broadly representative three-day workshop and represent a more specific definition than previously available of the many aspects of sex fairness in career interest inventories and related interpretive, technical, and promotional materials. The diverse concerns of inventory users, respondents, authors, and publishers were taken into consideration and resolved as far as possible. The guidelines are grouped in three sections: (1) The Inventory Itself, (2) Technical Information, and (3) Interpretive Information. Section 1 gives recommendations on the form and content of the interest inventory. Section 2 provides guidelines on the presentation and interpretation of materials, reporting of scores, composition of criterion groups and norm groups, investigation of the validity of interest inventories, and provisions for updating. Section 3 is concerned with the quality of interpretive information provided in detail in the publisher's manual and supporting materials. Footnotes and references are appended. It is believed these guideline recommendations will be valuable for developers, publishers, and users of career inventories. (NH)

ED 098314

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
NATIONAL INSTITUTE OF EDUCATION
WASHINGTON, D.C. 20208

First edition
July, 1974

Guidelines for Assessment of Sex Bias and Sex Fairness in Career Interest Inventories

The attached guidelines have been developed as part of the National Institute of Education (NIE) Career Education Program's study of sex bias and sex fairness in career interest inventories. They were developed by the NIE Career Education Staff and a senior consultant and nine-member planning group of experts in the fields of measurement and guidance, appointed by NIE. The draft guidelines were discussed in a broadly representative three-day workshop sponsored by NIE in Washington, D.C. in March 1974. Through successive revised drafts, culminating in this edition of guidelines, the diverse concerns of inventory users, respondents, authors, and publishers were taken into consideration and resolved as far as possible.

During the development of the guidelines, the following working definition of sex bias was used:

> Within the context of career guidance, sex bias is defined as any factor that might influence a person to limit--or might cause others to limit--his or her considerations of a career solely on the basis of gender.[1]

The working definition expresses the primary concern that career alternatives not be limited by bias or stereotyped sex roles in

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THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

the world of work.[2] The guidelines represent a more specific definition than previously available of the many aspects of sex fairness in interest inventories and related interpretive, technical, and promotional materials. The issues identified in the course of guideline development are dealt with in commissioned papers to be published by the U.S. Government Printing Office as a book, Issues of Sex Bias and Sex Fairness in Career Interest Measurement, available from the Career Education Program, National Institute of Education, Washington, D.C., 20208 in October 1974.

The term "career interest inventory," as used in these guidelines, refers to various formal procedures for assessing educational and vocational interests. The term includes but is not limited to nationally published inventories. The interest assessment procedures may have been developed for a variety of purposes and for use in a variety of settings. The settings include educational and employment-related settings, among others, and the uses include career counseling career exploration, and employee selection (although the latter may also involve other issues of sex bias in addition to those discussed here).

The guidelines do not represent legal requirements. They are intended as standards a) to which we believe developers and publishers should adhere in their inventories and in the technical and interpretive materials that the American Psychological Association (APA) Standards for Educational and Psychological

Tests (1974) requires them to produce, and b) by which users should evaluate the sex fairness of available inventories. There are many essential guidelines for interest inventories in addition to those relating to sex fairness. The guidelines presented here do not replace concerns for fairness with regard to various ethnic or socioeconomic subgroups. The guidelines are not a substitute for statutes or federal regulations such as the Equal Employment Opportunity Commission (EEOC) selection guidelines (1970) and Title IX of the Education Amendments of 1972 (1972), or for other technical requirements for tests and inventories such as those found in the APA standards. The guidelines thus represent standards with respect to sex fairness, which supplement these other standards.

The guidelines address interest inventories and related services and materials. However, sex bias can enter the career exploration or decision process in many ways other than through interest inventory materials. Several of the guidelines have clear implications for other materials and processes related to career counseling, career exploration, and career decision-making. The spirit of the guidelines should be applied to all parts of these processes.

The guidelines are presented here in three sections: I, The Inventory Itself; II, Technical Information; III, Interpretive Information.

I. The Inventory Itself

A. The same interest inventory form should be used for both males and females unless it is shown empirically that separate forms are more effective in minimizing sex bias.

B. Scores on all occupations and interest areas covered by the inventory should be given for both males and females, with the sex composition of norms--i.e., whether male, female, or combined sex norms--for each scale clearly indicated.

C. Insofar as possible, item pools should reflect experiences and activities equally familiar to both females and males. In instances where this is not currently possible, a minimum requirement is that the number of items generally favored by each sex be balanced. Further, it is desirable that the balance of items favored by each sex be achieved within individual scales, within the limitations imposed by validity considerations.

D. Occupational titles used in the inventory should be presented in gender-neutral terms (e.g., letter carrier instead of mailman), or both male and female titles should be presented (e.g., actor/actress).

E. Use of the generic "he" or "she" should be eliminated throughout the inventory.

II. Technical Information

A. Technical materials provided by the publisher should describe how and to what extent these guidelines have been met in the inventory and supporting materials.

B. Technical information should provide the rationale for either separate scales by sex or combined-sex scales (e.g., critical differences in male-female response rates that affect the validity of the scales vs. similarity of response rates that justify combining data from males and females into a single scale.

C. Even if it is empirically demonstrated that separate inventory forms are more effective in minimizing sex bias, thus justifying their use, the same vocational areas should be indicated for each sex.

D. Sex composition of the criterion and norm groups should be included in descriptions of these groups. Furthermore, reporting of scores for one sex on scales normed or constructed on the basis of data from the other sex should be supported by evidence of validity--if not for each scale, then by a pattern of evidence of validity established for males and females scored on pairs of similar scales (male-normed and female-normed, for the same occupation).

E. Criterion groups, norms, and other relevant data (e.g., validity, reliability, item response rates) should be examined at least every five years to determine the need for updating.

New data may be required as occupations change or as sex and other characteristics of persons entering occupations change. Text manuals should clearly label the date of data collection for criterion or norm groups for each occupation.

F. Technical materials should include information about how suggested or implied career options (e.g., options suggested by the highest scores on the inventory) are distributed for samples of typical respondents of each sex.

G. Steps should be taken to investigate the validity of interest inventories for minority groups (differentiated by sex). Publishers should describe comparative studies and should clearly indicate whether differences were found between groups.

III. Interpretive Information

A. The user's manual provided by the publisher should describe how and to what extent these guidelines have been met in the inventory and the supporting materials.

B. Interpretive materials for test users and respondents (manuals, profiles, leaflets, etc.) should explain how to interpret scores resulting from separate or combined male and female norms or criterion groups.

C. Interpretive materials for interest inventory scores should point out that the vocational interests and choices of men and women are influenced by many environmental and cultural factors, including early socialization, traditional sex-role expectations of society, home-versus-career conflict, and the experiences typical of women and men as members of various ethnic and social class groups.

D. Manuals should recommend that the inventory be accompanied by orientation dealing with possible influences of factors in C above on men's and women's scores. Such orientation should encourage respondents to examine stereotypic "sets" toward activities and occupations and should help respondents to see that there is virtually no activity or occupation that is exclusively male or female.

E. Interpretive materials for inventories that use homogeneous scales, such as health and mechanical, should encourage both sexes to look at all career and educational options, not just those traditionally associated with their sex group, within the broad areas in which their highest scores fall.

F. Occupational titles used in the interpretive materials and in the interpretation session should be stated in gender-neutral terms (e.g., letter carrier instead of mailman) or both male and female titles should be presented (e.g., actor/actress).

G. The written discussions in the interpretive materials (as well as all inventory text) should be stated in a way which overcomes the impression presently embedded in the English language that a) people in general are of the male gender, and b) certain social roles are automatically sex-linked.

H. The user's manual a) should state clearly that all jobs are appropriate for qualified persons of either sex; and b) should attempt to dispel myths about women and men in the world of work that are based on sex-role stereotypes. Furthermore, ethnic occupational stereotypes should not be reinforced.

I. The user's manual should address possible user biases in regard to sex roles and to their possible interaction with age, ethnic group, and social class, and should caution against transmitting these biases to the respondent or reinforcing the respondent's own biases.

J. Where differences in validity have been found between dominant and minority groups (differentiated by sex), separate interpretive procedures and materials should be provided that take these differences into account.

K. Interpretive materials for respondent and user should encourage exploratory experiences in areas where interests have not had a chance to develop.

L. Interpretive materials for persons re-entering paid employment or education and persons changing careers or entering post-retirement careers should give special attention to score interpretation in terms of the effects of years of stereotyping and home-career conflict, the norms on which the scores are based, and the options such individuals might explore on the basis of current goals and past experiences and activities.

M. Case studies and examples presented in the interpretive materials should represent men and women equally and should include but not be limited to examples of each in a variety of non-stereotypic roles. Case studies and examples of mature men and women and of men and women in different social class and ethnic groups should also be included where applicable.

N. Both user's manuals and respondent's materials should make it clear that interest inventory scores provide only one kind of

helpful information, and that this information should always be considered together with other relevant information--skills, accomplishments, favored activities, experiences, hobbies, influences, other test scores, and the like--in making any career decision. However, the possible biases of these variables should also be taken into consideration.

Footnotes

[1]For a comprehensive analysis of the many forms in which sex bias appears in written materials, the reader is referred to the guidelines of Scott, Foresman and Company (1972).

[2]An alternative interpretation of sex bias has been suggested by Dr. Dale Prediger and Dr. Gary Hanson. It defines sex restrictiveness in interest inventory reporting procedures and indicates under what conditions sex restrictiveness is evidence of sex bias. In summary, it can be stated as follows:

> An interest inventory is sex-restrictive to the degree that the distribution of career options suggested to males and females as a result of the application of scoring or interpretation procedures used or advocated by the publisher is not equivalent for the two sexes. Conversely, an interest inventory is not sex-restrictive if each career option covered by the inventory is suggested to similar proportions of males and females. A sex-restrictive inventory can be considered to be sex-biased unless the publisher demonstrates that sex-restrictiveness is a necessary concomitant of validity.

Still another interpretation has been suggested by Dr. John L. Holland:

> An inventory is unbiased when its experimental effects on female and male respondents are similar and of about the same magnitude--that is, when a person acquires more vocational options, becomes more certain, or learns more about himself (herself) and the world of work...The principles can be extended to any area of bias by asking what differences proposed revisions of inventories, books, teacher and counselor training would make.

A fuller explanation of both of these interpretations will appear in Issues of Sex Bias and Sex Fairness in Career Interest Measurement (U.S. Government Printing Office, 1974, in press).

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